

ABSTRACT

A substrate that includes a non-electrically conductive core having a first side and an opposing second side. A first electrically conductive layer is disposed on the first side of the core, and a second electrically conductive layer is disposed on the second side of the core. Electrically conductive core vias extend from the first side of the core to the
5 second side of the core. The core vias are disposed in an array. An electrically conductive contact is formed on an upper build-up layer on the first side of the core, and overlies the array of core vias. A first electrically conductive via electrically connects the contact to an intervening build-up layer disposed between the upper build-up layer and the first electrically conductive layer. The first via overlies the core via array. A second
10 electrically conductive via electrically connects the intervening build-up layer and the first electrically conductive layer, where the second electrically conductive via is not disposed over the core via array.

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